

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: Draft – XXXXX, 2016

Region: Raleigh Regional Office
County: Person
NC Facility ID: 7300061
Inspector's Name: Steven Carr
Date of Last Inspection: 08/20/2015
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): Louisiana-Pacific Corp - Roxboro Facility Address: Louisiana-Pacific Corp - Roxboro 10475 Boston Road Roxboro, NC 27573 SIC: 2493 / Reconstituted Wood Products NAICS: 321219 / Reconstituted Wood Product Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V				Permit Applicability (this application only) SIP: 15A NCAC 2Q .0513 NSPS: N/A NESHAP: 112(j)/DDDDD transition PSD: N/A PSD Avoidance: NC Toxics: Removal of 2Q .0705 112(r): N/A Other: Remove CAM (2D .0614) Avoidance			
Contact Data				Application Data			
Facility Contact Ross Reed Plant Environmental Manager (336) 599-8080 10475 Boston Road Roxboro, NC 27574	Authorized Contact Michael Sarder Plant Manager 10475 Boston Road Roxboro, NC 27573	Technical Contact Ross Reed Plant Environmental Manager (336) 599-8080 10475 Boston Road Roxboro, NC 27574	Application Number: 7300061.12A, 7300061.11A & 7300061.16A Date Received: 05/30/2012, 07/02/2012 & 03/14/2016 Application Type: Renewal/Modifications Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 07760/T20 Existing Permit Issue Date: 04/29/2013 Existing Permit Expiration Date: 11/30/2018				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	9.11	120.39	121.60	84.81	38.02	53.18	24.91 [Methanol (methyl alcohol)]
2013	9.54	108.48	130.23	50.94	58.60	55.53	25.67 [Methanol (methyl alcohol)]
2012	9.04	102.25	121.83	48.94	54.84	52.64	24.52 [Methanol (methyl alcohol)]
2011	6.95	79.38	93.10	38.63	43.56	40.06	18.46 [Methanol (methyl alcohol)]
2010	6.54	76.98	89.34	38.12	42.34	38.26	17.57 [Methanol (methyl alcohol)]
Review Engineer: Judy Lee Review Engineer's Signature: _____ Date: _____					Comments / Recommendations: Issue 07760/T21 Permit Issue Date: Permit Expiration Date: 05/31/2021		

I. Purpose of Application

This permitting action is a renewal with modification of an existing Title V permit pursuant to 2Q .0513. The initial Title V permit (07760T06) was issued on March 5, 2001 and has been modified several times since issuance. The current Title V permit (07760T20) was issued on April 29, 2016, and is currently scheduled to expire on November 30, 2018. The original renewal with modification application was received by the Division on May 30, 2012, or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. Application No. 7300061.11A for a Title V Significant Modification was received on March 29, 2011 (complete on July 2, 2012). This application for significant modification was consolidated into the renewal with modification for processing.

In addition, LP submitted a 502(b)(10) request (Application No. 7300061.16A) on March 14, 2016 that was consolidated with this renewal with modifications.

II. Facility Description

At the Roxboro plant, Louisiana-Pacific manufactures oriented strand board (OSB). The typical size of OSB is 4 feet by 8 feet. The thickness of the boards ranges from $\frac{1}{4}$ inch to $1\frac{1}{8}$ inches. The OSB manufacturing process consists of the following steps: (i) tree length logs are delivered to the mill and are debarked, (ii) waferizers reduce the logs into thin wafers that are dried in large triple pass rotary dryers heated by the bark burner and thermal oil heaters (TOH), (iii) wafers are blended with resins and wax, (iv) a large heated hydraulic press compresses the boards to the desired thickness, and (v) boards are trimmed to specification, labeled and packaged. The OSB is sold to domestic clients including Lowes, Home Depot and other building supply stores.

III. Application Chronology

Please see the attached Comprehensive Application Reports for 7300061.11A, 7300061.12A and 7300061.16A for more details.

IV. Permit Modifications/Changes and ESM Discussion

Changes to LP's current permit (**permit number 07760T21**) for this renewal with modification (application number 7300061.12A); significant modification (application number 7300061.11A) and 502(b)(10) (application number 7300061.16A) are summarized in the table below:

Old Page #	New Page #	Condition Number	Change
Cover Letter, Attachments and Pages 1 through 58	Cover Letter, Attachments and Pages 1 through 62	Entire permit, where applicable	Modified to reflect current permit number, issue and effective date, and associated application information. Updated language with current shell guidance.
Attachment		Table of Changes	Updated for this permit renewal with modifications
Attachment		Insignificant Activities	No Changes
Pages 3&4	Pages 3&4	Section 1 – Equipment Table	Added MACT & NSPS references Modified Adhesive roll coating operation and associated sheathing for application Added CYC9 saw trim recovery cyclone back to permit

Old Page #	New Page #	Condition Number	Change
--	Pages 12 – 16	Section 2-1 – A.9.	Added 112(j)/MACT DDDDD transition language
		Section 2-1 – A.10.	Inserted MACT DDDDD language
--	Pages 19 – 21	Section 2-1 – C	Added CYC9 saw trim recovery cyclone back
Pages 25 – 36	Pages 25 – 36	Section 2 – Condition 2.2-B.	Updated with new language regarding stack testing Updated with AOS for PSD avoidance condition
--	Page 50 – 51	Section 2.3	Added CAM exemption for Wafer drying process
Pages 48 – 58	Pages 52 – 62	Section 3 – General Conditions	Updated with most recent General Conditions (Version 4.0 12/17/15) & List of Acronyms

TVEE was updated to match permit and control scenarios.

V. Regulatory Review

- No new equipment or change in emissions were requested with this renewal application (7300061.12A)
- Facility requested an avoidance condition for Greenhouse Gas Emissions
- Significant modification (application #7300061.11A) – this is a second step to a previous significant modification for the Techshield modification
- In addition minor modification (application #7300061.13A) – this was a minor modification to convert from a two RTO system to a three RTO system; thus, some conditions need modification to reflect this change (i.e., toxics limits are based on the two RTO system)
- Also a 502(b)(10) modification (application No. 7300061.16A) was submitted on March 14, 2016 which will be consolidated into this renewal.

In addition to requirements provided in Section 3 – General Conditions, the facility is currently subject to the following regulations:

15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers (TOH AOS)
15A NCAC 02D .0512, Particulates from Miscellaneous Wood Products Finishing
15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes
15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources
15A NCAC 02D .0521, Control of Visible Emissions
15A NCAC 02D .0524, New Source Performance Standards (40 CFR Part 60 Subpart Dc & Subpart Kb)
15A NCAC 02D .0958, Work Practices for Sources of Volatile Organic Compounds
15A NCAC 02D .1100, Control of Toxics Air Pollutants
15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions
15A NCAC 02Q .0317, Avoidance Conditions for 15A NCAC 2D .0530, PREVENTION OF SIGNIFICANT DETERIORATION
15A NCAC 02Q .0705, EXISTING FACILITIES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT
15A NCAC 02Q .0711, Emission Rates Requiring a Permit

Regulations added/updated/modified significantly as part of this renewal with modification and significant modification are:

✓ **Boiler MACT/112j - 15A NCAC 02D .1109 and 40 CFR 63, Subpart DDDDD**

This facility has two – thermal oil heaters (**ID Nos. TOH-1 and TOH-2**) subject to the Case-by-Case MACT 112(j) due to the U. S. EPA’s failure to promulgate a valid standard as required under Section 112(d) of the Clean Air Act (CAA); thus, LP’s permit contains NC DAQ established requirements under 112(j).

The TOH’s have two operating scenarios:

- Primary Operating Scenario (POS) – MACT Subpart DDDD

POS - firing wood fuel and/or recycled resinated wood fuel and/or natural gas

two wood fuel/recycled resinated wood fuel/natural gas-fired thermal oil heaters (40 million Btu per hour heat input rate each) exhausting directly to the bark burner and indirectly supplying heat to the presses

- Alternate Operating Scenario (AOS) – MACT .1109 Case-by-Case & MACT DDDDD

AOS - firing natural gas only

two wood fuel/recycled resinated wood fuel/natural gas-fired thermal oil heaters (40 million Btu per hour heat input rate each) exhausting to stacks while firing natural gas only

➤ **15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters for ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(j)]**

✓ **15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters**

The initial compliance date for 112(j) was January 28, 2014. LP was required to:

- Comply with Best Combustion Practices
- Comply with emission standards placed in their permit (if applicable)
- Perform an annual inspection and maintenance inspection
- Conduct at least one tune-up per calendar year
- Comply with 40 CFR 63, Subpart DDDDD by May 23, 2019 (see discussion below)

✓ **15A NCAC 02D .1111 “Maximum Achievable Control Technology” (40 CFR 63, Subpart DDDDD)**

As required under 2Q .0526 “the Director shall establish a compliance date in the revised permit that assures that the owner or operator shall comply with the promulgated standard within a reasonable time, but no longer than eight years after such standard is promulgated or eight years after the date by which the owner or operator was first required to comply with the emission limitation established by permit, whichever is earlier. However, in no event shall the period for compliance for existing sources be shorter than that provided for existing sources in the promulgated standard.”

Per 40 CFR 63.56(b), the “switch over” date:

- Must be within a reasonable period of time; and,
- Cannot exceed 8 years from the promulgation date.

Part 63, Subpart B, Table 1 40 CFR Ch. I (7–1–11 Edition)

...

(b) If the Administrator promulgates a relevant emission standard under section 112(d) or (h) of the Act that is applicable to a source after the date a permit is issued pursuant to § 63.52 or § 63.54, the permitting authority must incorporate requirements of that standard in the title V permit upon its next renewal. The permitting authority must establish a compliance date in the revised permit that assures that the owner or operator must comply with the promulgated standard within a reasonable time, but not longer than 8 years after such standard is promulgated or 8 years after the date by which the owner or operator was first required to comply with the emission limitation established by the permit, whichever is earlier. However, in no event shall the period for compliance for existing sources be shorter than that provided for existing sources in the promulgated standard.

“Under the Clean Air Act, existing major source boilers with [CAA §112(j) standards] in their permits would have until at least 2018 to comply with the federal air toxics standards, unless the State sets an earlier deadline.”

► See Lisa Jackson (US EPA Administrator) letter to Sen. Kay Hagan, dated March 8, 2012.

Thus, the facility must comply with the Case-by-Case MACT from January 28, 2014 (initial 112(j) compliance date) until May 19, 2019. At that point, LP must comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63 Subpart DDDDD or MACT 5D). The renewed permit will be modified and the existing Permit Condition will be updated to indicate compliance with Subpart 5D beginning May 20, 2019.

Per current guidance, every Title V Permit Renewal that contains a 112(j) condition must be amended with the following statement added at the beginning of the 112(j) condition:

The Permittee shall comply with this CAA §112(j) standard until May 19, 2019. The initial compliance date for the applicable CAA §112(d) standard for “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters” is May 20, 2019.

Boiler MACT (40 CFR 63 Subpart DDDDD) language will also be added to the renewed permit per current DAQ Title V guidance; thus, the language provided by the 112(j) to MACT 5D Transition Team was inserted into this permit as provided by Mr. Joe Voelker, DAQ Permitting Section based on emission source information contained in LP’s current permit.

➤ LP Roxboro requested a permit condition to limit the Greenhouse Gas (GHGs) emissions from their facility to below the PSD threshold of 100,000 tpy.

✓ **15A NCAC 02D .0544 PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS FOR GREENHOUSE GASES**

(a) The purpose of this Rule is to implement a program for the prevention of significant deterioration of air quality for greenhouse gases as required by 40 CFR 51.166. For purposes of greenhouse gases, the provisions of this Rule shall apply rather than the provisions of Rule .0530 of this Section. A major stationary source or major modification shall not be required to obtain a prevention of significant deterioration (PSD) permit on the sole basis of its greenhouse gases emissions. For all other regulated new source review (NSR) pollutants, the provisions of Rule .0530 of this Section apply.

Whether a new source or modification is major and subject to New Source Review (NSR) under the Clean Air Act (CAA) is dependent on whether that source or modification has or will have the potential to emit (PTE) major or significant amounts of a regulated pollutant. Therefore, the definition of "potential to emit" under NSR is used in determining the applicability of new source review to a particular source. 40 CFR 52.21 (b) Definitions (4), define "potential to emit" as:

the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

As of January 2, 2011, in addition to the NSR pollutants listed in Section VIII below, Greenhouse Gases (GHGs) are now a NSR regulated pollutant. The GHG rule defines "greenhouse gases" as the aggregate group of six greenhouse gases – carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

On June 3, 2010, EPA issued a final rule that "tailors" the applicability provisions of the PSD and Title V programs to enable EPA and states to phase in permitting requirements for GHGs in a common sense manner referred to as the "Tailoring Rule." As a result of the Tailoring Rule, the definition of major stationary source under Title V and PSD permitting programs will be revised to 100,000 tpy or more of total GHGs on a CO₂e basis. Also, the PSD Significance Level will be defined as 75,000 tpy or more of total GHGs on a CO₂e basis for existing major sources. Under the Tailoring Rule, application of PSD to GHGs will be implemented in multiple steps, referred to as "Tailoring Rule Steps." Tailoring Rule "Step 1" was for New or Modified Sources whose permits were issued January 2, 2011 through June 30, 2011. LP submitted their application after June 30, 2011; thus, they fall under "Step 2."

Under "Step 2" of the tailoring rule a new source with a PTE for GHGs of greater than 100,000 tpy (CO₂e) and a mass emission rate of GHGs greater than 250 tpy is subject to PSD review.

Under the Tailoring Rule, the process for determining whether a source is emitting GHGs in an amount that would make the GHGs a regulated NSR pollutant, includes a calculation of, and applicability threshold for, the source based on CO₂e emissions as well as its GHG mass emissions. Consequently, when determining the applicability of PSD to GHGs, there is a two-part applicability process that evaluates both:

1. the sum of the CO₂e emissions in tpy of the six GHGs, in order to determine whether the source's emissions are a regulated NSR pollutant; and, if so
2. the sum of the mass emissions in tpy of the six GHGs, in order to determine if there is a major source or major modification of such emissions.

➤ **Under what conditions will I need to get a Title V permit?**

- No sources will be required to obtain title V permits solely as a result of their GHG emissions between January 2, 2011 and June 30, 2011.
- Starting July 1, 2011, a new source of GHG emissions that exceeds the thresholds in the final Tailoring rule (100,000 tons per year (tpy) of CO₂e for a new source and 100,000 tpy CO₂e and 75,000 tpy CO₂e resulting from a modification) will be required to obtain a title V permit.

- Existing sources would not need to include GHGs in their Title V permit until the permit is renewed or they make a major modification that increases emissions above 75,000 tons per year of CO₂e.

U.S. Supreme Court Decision in *Utility Air Regulatory Group v. EPA*

On June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA*, 134 S.Ct. 2427 (2014) (“UARG”). The Court held that EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT). In accordance with the Supreme Court decision, on April 10, 2015, the D.C. Circuit issued an amended judgment in *Coalition for Responsible Regulation, Inc. v. Environmental Protection Agency*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015), which, among other things, vacated the PSD and title V regulations under review in that case to the extent that they require a stationary source to obtain a PSD or title V permit solely because the source emits or has the potential to emit GHGs above the applicable major source thresholds. The D.C. Circuit also directed EPA to consider whether any further revisions to its regulations are appropriate in light of UARG, and if so, to undertake to make such revisions. In response to the Supreme Court decision and the D.C. Circuit’s amended judgment, the EPA intends to conduct future rulemaking action to make appropriate revisions to the PSD and operating permit rules.

Please refer to 15A NCAC 2D .0544 for more information.

LP Roxboro does not fall under the list of 28 source categories; thus, for PSD purposes the applicable threshold is 250 tpy for all regulated NSR pollutants, except for GHGs. LP is an existing Major Source under Title V and a Minor Source under PSD. This renewal with modification will not change the facility’s classification for either. However, for PSD purposes the facility has requested a permit condition limiting CO₂e to less than 100,000 tpy.

- ✓ The estimated GHG potential to emit (PTE) is shown in Table 1 – Section 4 of their Title V Renewal Application (total emissions of CO₂ equivalents equals 80,769.44 tons annually). In addition, based on the US Supreme Court Decision, GHGs would not trigger a PSD modification even if LP exceeded 100,000 tons per year at this facility since the other criteria pollutants are less than the PSD thresholds (250 tpy). Therefore, there is no need for a PSD avoidance condition for GHGs.

15A NCAC 2D .0614 “Compliance Assurance Monitoring” (40 CFR 64)

This facility is a Title V facility with potential emissions that exceed the Title V major source levels without considering controls. A Compliance Assurance Monitoring (CAM) determination was performed during the last renewal cycle because this facility has several emission sources with potential pre-controlled emissions greater than 100 tons per year. However, the facilities operations have not changed significantly since issuance of the last renewal.

- ✓ LP requested via a telephone conversation on April 27, 2016 if the pressure drop under the OSB finishing CAM requirements could be changed to daily versus once per shift. The DAQ did not change the CAM requirement.

The PSD Avoidance condition under Section 2.2-B in LP’s current permit contains a CAM exemption that will be moved to Section 2.3 of the renewed permit. See Section VI - CAM below.

15A NCAC 2Q .0317, Avoidance Conditions for 15A NCAC 2D .0530, PREVENTION OF SIGNIFICANT DETERIORATION The PSD Avoidance condition in LP-Roxboro's current permit was modified to incorporate new language for stack testing and how the Permittee will incorporate the results of stack testing from this point forward. DAQ policy has changed and Permittees will no longer be allowed to administratively make changes to the test parameters and emission factors in the permit.

- The renewal of this permit does not require PSD analysis because no emissions increase was requested. See Section VI below.

15A NCAC 2Q .0705 – Existing Facilities and SIC Calls

Once sources at a facility subject to a MACT standard trigger their "last MACT", the Permittee must submit a permit application that includes an evaluation for all toxic air pollutants covered under 15A NCAC 2D .1104 for all sources at the facility, excluding those sources exempt from evaluation under 15A NCAC 2Q .0702. The last MACT for LP-Roxboro will be the Plywood and Composite Wood Products NESHAP, which triggers applicability to this regulation. The compliance date for the last MACT has passed. The facility was granted an extension; therefore, at this time a placeholder for this regulation will be placed in the permit along with the placeholder for the future "last MACT" standard.

- ✓ *Repealed Effective May 1, 2014. Therefore, all reference to this rule will be removed from the renewed permit.*

15A NCAC 2Q .0523 "CHANGES NOT REQUIRING PERMIT REVISIONS"

Per 15A NCAC 2Q .0523 (a)(3) Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first. Thus, as part of this permit renewal the technical review of LP's requested 502(b)(10) change received on March 14, 2016 of an upcoming 502(b)(10) change at their facility located in Roxboro, North Carolina must be addressed. The request proposed changes to the wafer drying process. Per the request LP desired to replace two process cyclones, designated PCYCD-3 and PCYCD-5, with two new identical sized units. There has been a change to the metallurgy to improve the life of the units. In addition, LP will replace the carbon steel ductwork from dryer #3 to the new cyclone, from the new cyclone to the ID fan, and from the ID fan to the WESP mixbox with identically sized stainless steel ductwork. LP also intends to install a different atmospheric damper system on abort stack #3. All five dryer ID fan housings are also being replaced with identically sized units, but constructed of stainless steel instead of carbon steel. LP indicated that this change will not increase emissions and certified that this change qualifies as a 502(b)(10) change under 15A NCAC 2Q .0523.

- DAQ sent an email to LP asking for the ACFM of the cyclones being replaced since they are process cyclones located after the dryers. A PE Seal would be required per 15A NCAC 02Q .0112, if the air flow is greater than 10,000 ACFM for particulate control.
- DAQ sent LP a letter dated March 18, 2016 via email which acknowledged receipt of their notification and indicated that they may implement the change provided they have given EPA a seven day advanced notice with the information specified in 15A NCAC 2Q .0523(a)(2) and have attached a copy of the notification to their permit.
- On April 29, 2016, DAQ requested the information necessary to complete the changes to LP's Title V Permit through a Completeness/Technical Additional Information Request associated with Application Nos. 7300061.16A of Air Quality Permit No. 07760T21. Also, a reminder that a PE Seal was required because the air flow through the two cyclones was each greater than 10,000 ACFM for particulate matter.

A PE Seal was required for this modification and was sealed by XXXX, Professional Engineer on May XXXX (Seal #XXXX).

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS – This facility is currently subject to the following 15A NCAC 2Q .0524 “New Source Performance Standards,” 40 CFR 60 requirements:

- NSPS, Subpart Dc requirements for two thermal oil heaters (ID Nos. TOH-1 and TOH-2). The renewal of this permit does not require NSPS analysis for TOH-1 and TOH-2.
- NSPS, Subpart Kb requirements for six volatile organic liquid storage tanks (12,000 gallon capacity each), which are considered insignificant due to Subpart Kb exemptions as of October 15, 2003, Federal Register (Volume 68, No. 199).

NESHAPS/MACT – This facility is currently required to comply with the following 15A NCAC 2D .1111 “Maximum Achievable Control Technology Standards,” 40 CFR 63 requirements:

- ✓ Emissions estimates show that potential emissions from the LP facility exceed major source thresholds for HAP, which triggers applicability of Title 40: Protection of Environment, PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) FOR SOURCE CATEGORIES Standards as discussed below:
- 40 CFR Part 63 Subpart QQQQ: National Emission Standards for Hazardous Air Pollutants for Surface Coating of Wood Building Products
The TechShield® manufacturing process located at the LP-Roxboro facility is subject to the Surface Coating of Wood Building Products NESHAP.
- 40 CFR Part 63, Subpart DDDD: National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products Manufacture (PCWP MACT)
The OSB manufacturing sources located at the LP-Roxboro facility are subject to the Plywood and Composite Wood Products NESHAP.

Dryers meet the definition of an affected source under the Plywood MACT;
Thermal oil heaters (TOH-1 & TOH-2) meet the definition of an affected source under the Plywood MACT, as currently permitted.

MACT applicability was based on the following:

Federal Register / Vol. 69, No. 146 / Friday, July 30, 2004 / Rules and Regulations

B. Overlap With Other Rules, p. 45963 "Any emissions from a combustion unit that are not routinely through the direct-fired dryers would be subject to the Industrial/Commercial/Institutional Boilers and Process Heaters NESHAP. Therefore, if the emissions from a combustion unit are split such that only a portion of the emissions are routed through a direct-fired dryer, then the combustion unit would be subject to both rules."

The dryers meet the definition of an affected source as stated above, "...since the exhaust from the TOHs routinely pass through the dryers," based on the March 2007 permit application submittal (page 2-3); therefore, they are not subject to the boiler MACT. The application further states "Under routine operations, the TOHs exhaust to the bark burner and then to the wafer dryers, providing heat

for the dryers. In this method of operation, the units would not be considered sources subject to the Boiler MACT as they are vented to affected sources per the Plywood MACT.”

63.7491 Are any boilers or process heaters not subject to this subpart?

(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR 63.

- An Alternative Operating Scenario (AOS) was added to LP’s permit for the TOHs to allow the exhaust to bypass the dryers/bark burner when firing natural gas only; thus, during their Primary Operating Scenario (POS) the combustion unit is routinely routed through the direct-fired dryers; thus subject to Subpart DDDD per §63.2232(b);

“the combustion unit exhaust stream routinely used to direct fire process unit(s)”

For the AOS, there are no requirements when firing natural gas under the Plywood MACT

- 15A NCAC 2D .1100 – CAA 112(j) Case-by-Case MACT for Boilers and Process Heaters On **July 20, 2007**, the DC Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, which had been promulgated under 40 CFR 63, Subpart DDDDD. The North Carolina Attorney General’s Office has determined that the NESHAP vacatur equates to the failure of the US EPA to promulgate a standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) Standards required under CAA 112(j), commonly referred to as the MACT ‘hammer’ provisions have been triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 2D .1109.

However, per the Federal Register Notice:

“Any emissions from a combustion unit that are not routinely through the direct-fired dryers would be subject to the Industrial/Commercial/Institutional Boilers and Process Heaters NESHAP.”

Thus, the TOH’s (AOS) was addressed during processing of the 112(j) application.

On **September 8, 2009**, the NC DAQ received a request from LP Roxboro for a 112(j) Part II MACT ‘hammer’ application for two thermal oil or process heaters (ID Nos. TOH-1 and TOH-2) during certain operating conditions.

See Section V – Regulatory Review Boiler MACT/112j - 15A NCAC 02D .1109 and 40 CFR 63, Subpart DDDDD above.

- 15A NCAC 2D .1111 – 40 CFR 63, Subpart ZZZZ
The diesel-fired emergency generator (ID No. ENG1) and diesel fire pump (ID No. IS-DF-1) are subject to Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Attainment Status

Based on the EPA’s December 26, 2007 publication in the Federal Register, Vol. 72, No. 246, Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; North Carolina; Redesignation of the Raleigh-Durham-Chapel Hill 8-Hour Ozone Nonattainment Area to Attainment for Ozone, Person County was re-designated as ATTAINMENT. No permit change is required.

PSD – Person County has been triggered for PSD increment tracking for PM₁₀ and SO₂. However, there are NO increases in emissions for this renewal.

112(r) – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store, process or use any of the 112 (r) regulated substances in quantities above the thresholds in the Rule.

CAM – A Compliance Assurance Monitoring (CAM) (40 CFR Part 64) determination is not required for this renewal because all sources were evaluated during the previous renewal cycle (Please refer to the review for Air Quality Permit No. 07760T15 issued on March 6, 2008). No significant equipment or emission changes have occurred since that time; thus, CAM remains the same.

VII. Facility Wide Air Toxics

The facility must comply with the emission limitations and other requirements of 2D .1100 and 2Q .0711. The facility's permit currently has facility-wide emission limitations for toxic air pollutants based on previous modeling under 2D .1100, which will remain in the permit.

No increase in toxics was requested with this application submittal; therefore, no changes to toxics regulations are required for this permit renewal or significant modification.

VIII. Facility Emissions Review

There is no change in emissions for this renewal with modifications. The following table represents the latest years emissions based on Fees Module Data and potential emissions as provided in LP's application submittals:

Pollutant(s)	2014 Actual Emissions (tpy) based on Emissions Inventory	Potential Emissions (tpy) based on PSD Avoidance – Federally Enforceable Limits	Potential Emissions (tpy) based on application before controls & without considering Permit Limits
Carbon Monoxide (CO)	84.81	<250	314.7
Nitrogen Oxides (NO _x)	120.39	<250	373.6
Particulate Matter of 100 microns or less (PM or TSP)	39.64	<250	286.4
Particulate Matter of 10 microns or less (PM ₁₀)	38.02	<250	251.1
Particulate Matter of 2.5 microns or less (PM _{2.5})	38.02	<250	251.1
Sulfur Dioxide (SO ₂)	9.11	--	23
Volatile Organic Compounds (VOC)	121.60	<250	252.5
Lead (Pb)	0.002	0.01	0.01

Pollutant(s)	2014 Actual Emissions (tpy) based on Emissions Inventory	Potential Emissions (tpy) based on PSD Avoidance – Federally Enforceable Limits	Potential Emissions (tpy) based on application before controls & without considering Permit Limits
Methane (CH ₄)	NR	24.4	NR
Nitrous Oxide (N ₂ O)	NR	7.6	NR
Carbon Dioxide (CO ₂)	NR	77,893.9	NR
CO ₂ Equivalent (CO _{2e})	NR	80,769.4	NR
Total Toxic Air Pollutants (TAP)	21.99	--	27.6
Total Hazardous Air Pollutants (HAP)	53.31	--	2,672.6

IX. Compliance History (from Latest Compliance Inspection Report)

(VIII) ENFORCEMENT HISTORY: Louisiana-Pacific has been issued one Notice of Violation (NOV) according to DAQ records. On June 20, 2006, the company was issued an NOV for a late submittal of their 2005 annual compliance certification. No civil penalties were assessed against the company for this violation.

...

(X) CONCLUSIONS/RECOMMENDATIONS: Based on observations made during the August 20, 2015 inspection, Louisiana-Pacific appeared to be in compliance with the requirements of their Title V permit. It is recommended that the facility be inspected again in one year.

X. Stipulation Review

RRO had the following suggestions:

Email to Charles McEachern, RRO, on XXXX - no comments at this time.

A draft permit and review were sent to Mr. McEachern, RRO for review on XXXX and comments received on XXXX.

All of Mr. McEachern's recommendations were taken into consideration during this review.

A draft permit was sent to Mr. Reed, LP Roxboro for review on XXXX and comments received on XXXX.

XI. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 2Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. Virginia is an affected State within 50 miles of this facility and will be notified accordingly.

Public Notice to Affected States of the DRAFT Title V Permit began on XXXX

Comments Received on the Draft Permit – No comments received from the Affected States

Public Notice of the DRAFT Title V Permit ran from XXXX

Comments Received on the Draft Permit – XXXX

EPA's 45 Day Review period ran concurrent with the 30 day Public Notice from XXXX. Notice was sent to Ms. XXXX, Air Permits Section, U. S. EPA, Region 4, Atlanta, GA.

Comments Received on the Draft Permit – No EPA comments regarding the Draft Permit have been received to date from U. S. EPA, Region 4.

XII. Conclusions, Comments, and Recommendations

Pursuant to 15A NCAC 2Q .0112 “Application requiring a Professional Engineering Seal,” a professional engineer’s seal (PE Seal) is required to seal technical portions of air permit applications for new sources and modifications of existing sources as defined in Rule .0103 of this Section that involve:

- (1) design;
- (2) determination of applicability and appropriateness;
- (3) or determination and interpretation of performance; of air pollution capture and control systems.

A professional engineer’s seal (PE Seal) was **NOT** required for this renewal.

However, a PE Seal was required for the significant modification and was sealed by Daryl J. Whitt, Professional Engineer on May 29, 2012 (Seal #027722).

Also, as indicated under Section V above a PE Seal was required for LP’s 502(b)(10) change pursuant to 15A NCAC 2Q .0523 that was approved by DAQ on March 18, 2016.

Zoning

A Zoning Consistency Determination per 2Q .0304(b) that satisfied the requirements of North Carolina General Statue (NCGS) 143-215.108(f) was not required for his renewal or significant modification.

RRO recommends issuance of the permit and DOES request a DRAFT permit prior to issuance. RCO concurs with RRO’s recommendation to issue the renewed air permit per Mr. McEachern’s email dated XXXX.

The revised permit (**Air Quality Permit Number 07760T21**) was signed on XXXX with an effective date of XXXX per facility’s request on XXXX.